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EXAMINER				
WENDMAGEGN, GIRUMSEW				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/813,113

Applicant(s)

YIM, KYEONG SU

Examiner

GIRUMSEW WENDMAGEGN

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31, 33-36 and 38-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31, 33-36 and 38-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim1-31,33-36,38-43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim1-13, 15-29, 34-36, 38, 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kunii et al (Pub No US 2002/0122080), Hallenbeck (Patent No US 5,293,357) and further in view of Nakagawa et al (Pub No US 2001/0022630).

Regarding claim34, Kunii teaches a method for reservation-recording a broadcasting program, the method comprising: storing broadcasting program information in a mobile terminal (see paragraph 0127); transmitting a radio frequency signal or an infrared signal corresponding to a reservation- recording information from the mobile terminal to a recording apparatus based on a reservation- recording key of the mobile terminal (see paragraph 0257, fig.46 s95) , and performing a reservation-recording in the recording apparatus based on the reservation-recording information (see paragraph 0257, fig.46 s95) but does not teach the recording apparatus comprises

an event timer that receives power through a battery and turns on power of the recording apparatus at a preset reservation time based on the reservation-recording information; and performing a reservation-recording in the recording apparatus based on the reservation-recording information when the recording is in a power-on state.

Hallenbeck teaches recording apparatus comprises event timer that turns on the power of the recording apparatus at a preset reservation time based on the reservation-recording information (see fig. 1 and 2 Even timer 21) and performing a reservation-recording in recording apparatus based on the reservation-recording information when the recording is in a power-on state (see column6 line1-8)

One of ordinary skill in the art at the time the invention was made would have been motivated to use even timer as in Hallenbeck in to Kunii because it would allow the system to save power by shutting off the recording apparatus.

Hallenbeck does not teach an event timer that receives power through a battery. However, Nakagawa et al (hereinafter Nakagawa) teaches VCR with backup battery power.

One of ordinary skill in the art at the time the invention was made would have been motivated to use backup battery for the VCR as in Nakagawa to allow the event timer to stay powered in case of regular power lose.

Regarding claim36, Kunii teaches recording apparatus, comprising a receiver configured to receive a radio frequency signal or an infrared signal corresponding to a reservation-recording information input via a reservation-recording key of a mobile

terminal (see paragraph 0257, see figure 46 s96); and an event timer configured to store the reservation-recording information and perform reservation-recording at a preset reservation time based on the reservation-recording information (see paragraph 0257) but does not teach the event timer receives power through a battery, and turns on power of the recording apparatus at the preset reservation time based on the reservation-recording information.

Hallenbeck teaches recording apparatus comprises event timer that turns on the power of the recording apparatus at a preset reservation time based on the reservation-recording information (see fig. 1 and 2 Even timer 21) and performing a reservation-recording in recording apparatus based on the reservation-recording information when the recording is in a power-on state (see column 6 line 1-8)

One of ordinary skill in the art at the time the invention was made would have been motivated to use even timer as in Hallenbeck in to Kunii because it would allow the system to save power by shutting off the recording apparatus.

Hallenbeck does not teach an event timer that receives power through a battery. However, Nakagawa et al (hereinafter Nakagawa) teaches VCR with backup battery power.

One of ordinary skill in the art at the time the invention was made would have been motivated to use backup battery for the VCR as in Nakagawa to allow the event timer to stay powered in case of regular power lose.

Regarding claim38, Kunii teaches the recording apparatus of claim 36, wherein the event timer comprises a non-volatile memory (see figure 7).

Regarding claim1, Kunii teaches the method of claim34, comprising: downloading program information before storing the broadcast program information in the mobile terminal (see paragraph 0127, downloading TV program information) ; converting the stored broadcasting program information in to data information to be displayed on a screen of the mobile terminal and the outputting the data information to the screen of the mobile terminal (see figure25 and paragraph 0235) ; and performing the reservation-recording by receiving a user's input via the reservation-recording key of the mobile terminal based on the searched broadcasting program information (see paragraph 0127).

Regarding claim2, Kunii teaches the method of claim1, wherein performing the reservation- recording includes transmitting the reservation-recording information to an event timer of the recording apparatus in response to the input of the reservation-recording key of the mobile terminal (see paragraph 0281-0291) ; and storing the transmitted reservation-recording information in the event timer of the recording apparatus, operating the event timer era-at a preset reservation time based on the reservation recording information thereby turning on a power of the recording apparatus, and performing a the reservation-recording (see paragraph 0281-091).

Regarding claim3, Kunii teaches the method of claim 1, wherein in performing the reservation-recording, the broadcasting program information selected by a user among the displayed broadcasting program information is wirelessly transmitted to the record apparatus (see page17 paragraph 0291).

Regarding claim4, Kunii teaches the method of claim 1, wherein in downloading the broadcasting program information and storing, the broadcasting program information is downloaded through a broadcasting program data service provider's Internet homepage (see page10 paragraph 0177).

Regarding claim5, Kunii teaches the method of claim 1, wherein in downloading the broadcasting program information and storing, the broadcasting program information is directly downloaded from a broadcasting receiver where broadcasting program information is stored (see page11 paragraph 0190).

Regarding claim6, Kunii teaches the method of Claim 1, wherein in outputting the data information to the screen, icons are generated on the basis of the stored broadcasting program information and displayed on the screen (see figure23-25 and page2 paragraph 0038).

Regarding claim7, Kunii teaches the method of claim 6, wherein if one of the displayed icons is selected, broadcasting channel information, broadcasting time

information, and broadcasting program information according to each channel and time are displayed in a list form (see figure 25).

Regarding claim8, Kunii teaches the method of claim 7, wherein in performing the reservation-recording, when a user selects an arbitrary broadcasting program, broadcasting channel information and broadcasting time information corresponding to a title of the selected broadcasting program are displayed enlarged (see figure29), and a guide message inquiring whether the information is to be set as the reservation recording information is displayed (see figure 37).

Regarding claim9, Kunii teaches the method of claim 1, wherein in providing for searching of the broadcasting program information, if an electric program guide (EPG) is provided as the broadcasting program information, a channel is set by inputting an up/down key of the mobile terminal when the channel inside the EPG is highlighted (see figure 29).

Regarding claim10, Kunii teaches the method of claim 9, wherein in providing for searching of the broadcasting program information, a software channel management for the broadcasting program information is provided to the mobile terminal to compare a channel set by a user with channel information of the program guide and to perform a channel search among substantial active channels (see page10 paragraph 0181).

Regarding claim11, Kunii teaches the method of claim 1, wherein the mobile terminal downloads broadcasting program information through a broadcasting receiver that receives broadcasting program information, stores the broadcast program information in a memory, and performs a search and the reservation-recording of the broadcasting program information (see page7 paragraph 0127).

Regarding claim12, Kunii teaches the method of claim 1, wherein the mobile terminal accesses to a wireless Internet network through a mobile communication module to download a broadcasting program from a broadcasting program service provider's Internet homepage and store the program in a memory, and then performs a search and the reservation-recording of the program (see Page10 paragraph 0177 and page14 paragraph 0242-0244).

Regarding claim13, Kunii teaches the method of claim35, further comprising: transmitting the packetted reservation-recording information to a subscriber's server through a wireless Internet network (see page17 paragraph 0288)

Regarding claim15, Kunii teaches the method of claim 13, wherein in performing the reservation-recording, the reservation-recording information is stored by an event timer including a non-volatile memory, a power of the recording apparatus is turned on at a preset reservation time of the broadcasting program on the basis of the

reservation- recording information, and a reservation-record is performed (see page14 paragraph 0242-0244 and figure39 element 363).

Regarding claim 16, Kunii teaches the method of claim 13, wherein the transmission packet includes a packet header that informs of a data content, a subscriber's code that informs of subscriber's information, the reservation-recording information, and the subscriber's IP information(see page5 paragraph 0093).

Regarding claim17, Kunii teaches the method of claim 16, wherein the reservation-recording information includes channel information that performs the reservation-recording, time information regarding reservation start time and reservation finish time, and category information including a program list (see page14 paragraph 0242-0244).

Regarding claim18, Kunii teaches the method of claim 13, wherein the transmission packet includes a packet header that informs of a data content, the subscriber's mobile terminal information, the reservation-recording information, and modem information when the recording apparatus is connected to the Internet by a telephone wire (see page5 paragraph 0093).

Regarding claim19, Kunii teaches a broadcasting program reservation-recording system using mobile terminal, the system comprising: a CDMA module provided with a

mobile communication module that receives broadcasting program information (see figure 1 paragraph 0080) ; a remote communication controller that exchanges data with a recording apparatus or performs a wireless communication in order to control the recording apparatus (see paragraph 0125) ; a storage device that stores broadcasting program information received through the CDMA module and control data for the recording apparatus received by the remote communication controller (see paragraph 0127); a controller that converts the broadcasting program information stored in the storage device into data information of a suitable form to be displayed and output (see figure 5 element 81); and a display device that displays data information regarding the broadcasting program information output from the controller on a screen (see figure 5 element 31), wherein the system is configured to transmit a radio frequency signal or an infrared signal corresponding to a reservation-recording information from the mobile terminal to the recording apparatus based on a reservation-recording key of the mobile terminal to perform power management of the recording apparatus and a reservation-recording in the recording apparatus based on the reservation-recording information (see paragraph 0257, see figure 46 s95) but does not teach the event timer receives power through a battery, and turns on power of the recording apparatus at the preset reservation time based on the reservation-recording information.

Hallenbeck teaches recording apparatus comprises event timer that turns on the power of the recording apparatus at a preset reservation time based on the reservation-recording information (see fig. 1 and 2 Even timer 21) and performing a reservation-

recording in recording apparatus based on the reservation-recording information when the recording is in a power-on state (see column6 line1-8)

One of ordinary skill in the art at the time the invention was made would have been motivated to use even timer as in Hallenbeck in to Kunii because it would allow the system to save power by shutting off the recording apparatus.

Hallenbeck does not teach an event timer that receives power through a battery. However, Nakagawa et al (hereinafter Nakagawa) teaches VCR with backup battery power.

One of ordinary skill in the art at the time the invention was made would have been motivated to use backup battery for the VCR as in Nakagawa to allow the event timer to stay powered in case of regular power lose.

Regarding claim20, Kunii teaches the system of claim 19 further comprising a key input device that receives a user selection of the data information displayed on the screen (see figure5 element 32 and 48).

Regarding claim21, Kunii teaches the system of claim 19, wherein the controller comprises: a CPU that generates icons for searching or controlling the broadcasting program information based on the data stored in the storage device and outputs the generated icons on the screen of the mobile terminal (see figure4 element 41); and a companion chip that controls an operation of the remote communication controller through an interface with the CPU (see figure4 element 22 and 64).

Regarding claim22, Kunii teaches the system of claim 19, wherein the controller sets an arbitrary broadcasting program selected by a user among the broadcasting program information displayed on the display device in the recording apparatus as the reservation- recording information (see figure 29 and 39).

Regarding claim23, Kunii teaches the system of claim 21, wherein the remote communication controller comprises: a remote control module that outputs a remote control signal in response to a remote control command for the recording apparatus provided from the companion chip connected to the CPU (see page6 paragraph0120); and a transmitter/receiver that performs a wireless data communication link with the recording apparatus by receiving the remote control signal from the remote control module (see page6 paragraph0120).

Regarding Claim24, Kunii teaches the system of claim 23, wherein the transmitter/receiver comprises: an infrared transmitter and an infrared receiver (IR transmitter/receiver) for that provides an infrared wireless data communication link; and a radio frequency data communication link (RF transmitter/receiver) that provides a high frequency wireless data communication link (see figure 5 element 22, 53 and 64).

Regarding claim25, Kunii teaches the system of claim 19, wherein the display device comprises: video controller (see figure5 element 87); an audio codec (see page6

paragraph 0121); a liquid crystal display (LCD) screen (see page6 paragraph 0117); a speaker and a microphone (see figure5 element 50).

Regarding claim26, Kunii teaches a broadcasting program reservation-recording system using a mobile terminal ,the system comprising: a service center that provides broadcasting program information (see figure1 element 14 and figure10); a mobile terminal that allows for searching of a broadcasting program by downloading broadcasting program information from the service center and that transmits a radio frequency signal or an infrared signal corresponding to a reservation-recording information from the mobile terminal to a recording apparatus based on a reservation-recording key of the mobile terminal to perform power management of the recording apparatus and a reservation-recording in the recording apparatus based on the reservation-recording information (see paragraph 0127; 0257, see figure46 s95); and the recording apparatus that reservation-records the broadcasting program provided from the Service center based on the output reservation- recording information received fro the mobile terminal (see page17 paragraph 0291) but does not teach the event timer receives power through a battery, and turns on power of the recording apparatus at the preset reservation time based on the reservation-recording information.

Hallenbeck teaches recording apparatus comprises event timer that turns on the power of the recording apparatus at a preset reservation time based on the reservation-recording information (see fig. 1and 2 Even timer 21) and performing a reservation-

recording in recording apparatus based on the reservation-recording information when the recording is in a power-on state (see column6 line1-8)

One of ordinary skill in the art at the time the invention was made would have been motivated to use even timer as in Hallenbeck in to Kunii because it would allow the system to save power by shutting off the recording apparatus.

Hallenbeck does not teach an event timer that receives power through a battery. However, Nakagawa et al (hereinafter Nakagawa) teaches VCR with backup battery power.

One of ordinary skill in the art at the time the invention was made would have been motivated to use backup battery for the VCR as in Nakagawa to allow the event timer to stay powered in case of regular power lose.

Regarding claim27, Kunii teaches the system of claim 26 further comprising a mobile communication station that provides a wireless communication device between the service center and the mobile terminal (see figure1 element 2).

Regarding claim28, Kunii teaches the system of claim 26, wherein the service center includes information of the mobile terminal and Internet access information of the recording Apparatus (see page5 paragraph 0093).

Regarding claim29, Kunii a teaches the system of claim 28, wherein the internet access information includes IP address information of the recording apparatus when the

recording apparatus is connected to the Internet by an Ethernet, and includes telephone number information when the recording apparatus is connected to the internet by a telephone wire (see page5 paragraph 0093).

Regarding claim35, Kunii anticipates a method for reservation-recording a broadcast program using a mobile terminal, the method comprising: searching broadcasting program information in a mobile terminal (see paragraph 0127); transmitting a reservation-recording information with a subscriber's IP address in a transmission packet form a recording apparatus and a reservation-recording the recording apparatus based on the reservation-recording information (see paragraph 0257), wherein a radio frequency signal or an infrared signal corresponding to the reservation-recording information is transmitted to the recording apparatus by selecting a reservation-recording key of the mobile terminal based on the searched broadcasting program information (see paragraph 0257, see figure46 s95) but does not teach the event timer receives power through a battery, and turns on power of the recording apparatus at the preset reservation time based on the reservation-recording information.

Hallenbeck teaches recording apparatus comprises event timer that turns on the power of the recording apparatus at a preset reservation time based on the reservation-recording information (see fig. 1and 2 Even timer 21) and performing a reservation-recording in recording apparatus based on the reservation-recording information when the recording is in a power-on state (see column6 line1-8)

One of ordinary skill in the art at the time the invention was made would have been motivated to use even timer as in Hallenbeck in to Kunii because it would allow the system to save power by shutting off the recording apparatus.

Hallenbeck does not teach an event timer that receives power through a battery. However, Nakagawa et al (hereinafter Nakagawa) teaches VCR with backup battery power.

One of ordinary skill in the art at the time the invention was made would have been motivated to use backup battery for the VCR as in Nakagawa to allow the event timer to stay powered in case of regular power lose.

Regarding claim40, Kunii teaches a receiver configured to receive a radio frequency signal or an infrared signal corresponding to reservation-recording information (see paragraph 0298, figure4 s96) but does not teach the event timer receives power through a battery, and turns on power of the recording apparatus at the preset reservation time based on the reservation-recording information.

Hallenbeck teaches recording apparatus comprises event timer that turns on the power of the recording apparatus at a preset reservation time based on the reservation-recording information (see fig. 1and 2 Even timer 21) and performing a reservation-recording in recording apparatus based on the reservation-recording information when the recording is in a power-on state (see column6 line1-8)

One of ordinary skill in the art at the time the invention was made would have been motivated to use even timer as in Hallenbeck in to Kunii because it would allow the system to save power by shutting off the recording apparatus.

Hallenbeck does not teach an event timer that receives power through a battery. However, Nakagawa et al (hereinafter Nakagawa) teaches VCR with backup battery power.

One of ordinary skill in the art at the time the invention was made would have been motivated to use backup battery for the VCR as in Nakagawa to allow the event timer to stay powered in case of regular power lose.

Claim14, 30-33, 39,41-43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kunii et al (Pub No US 2002/0122080), Hallenbeck (Patent No US 5,293,357) and Nakagawa et al (Pub No US 2001/0022630) as applied to 1-13, 15-29, 34-36, 38, 40 above and further in view of Atkinson et al (Patent no US 6,760,850).

Regarding claim14, 30, see the teaching of Kunii, Hallenbeck and Nakagawa above. All do not teach the recording apparatus is provided with a wakeup LAN module thus to turn on the recording apparatus at the time of a data communication request from outside. However Atkinson et al (hereinafter Atkinson) teaches using wakeup LAN to turn on/off power of a device (see figure3 and column7 line 35-53).

One of ordinary skill in the art at the time the invention was made would have been motivated to use wakeup on LAN as in Atkinson in to Kunii system because it would allow the recording device to save power by keeping it off when it is not in use.

Regarding claim 31, 41, Atkinson teaches the system of claim 30, wherein the event timer comprises: a system bios device including control information that controls a power of the recording apparatus (see column 7 line 4-12); a physical layer unit for performing an interface with the system bios unit in response to the data communication request from outside (see figure 3 element 218); and a backup battery for providing a power to the physical layer unit and the system bios unit (see figure 3 element 318).

Regarding claim 42, Atkinson teaches the system of claim 31 further comprising a power controller that turns on/off power of the recording apparatus based on the power control information of the system bios device (see figure 3 element 304 and 322).

Regarding claim 33, 39, 43, Atkinson teaches the system of claim 31, wherein the system bios device includes a power management logic device that stands by with an operation-enable state by receiving a minimum power from the backup battery (see column 7 line 63-67).

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIRUMSEW WENDMAGEGN whose telephone number is (571)270-1118. The examiner can normally be reached on 7:30-5:00, M-F, all Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Girumsew Wendmagegn/
Examiner, Art Unit 2621

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2621